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RS-CH-Water
Beckjord

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Dames & Moore
Miami Fort and Walter C. Beckjord Generating
Stations 316(b) Study: First Quarterly Data
Presentation, April 1, 1977 to June 30, 1977.

MIAMI FORT AND WALTER C. BECKJORD GENERATING
STATIONS 316 (b) STUDY
FIRST QUARTERLY DATA PRESENTATION
APRIL 1, 1977 TO JUNE 30, 1977

Dames & Moore
September 16, 1977
Job. No. 02580-025-17

DAMES & MOORE

September 16, 1977

Cincinnati Gas & Electric Company
315-355 Main Street
Cincinnati, OH 45202

Attention: Mr. James D. Flynn
Manager, Licensing & Environmental
Affairs Department

Gentlemen:

Attached to this letter are the data collected by Dames & Moore on fish impingement and entrainment at your Miami Fort and Walter C. Beckjord Generating Stations during the first quarter of our sampling program, April through June. As indicated by the tabs, the data are organized into two sections by type of information: entrainment or impingement. Each of these sections are further divided to present monthly and daily summaries for each of the four intakes (Miami Fort, Beckjord 1, 2, and 3). In the case of the Beckjord Station, intake 1 is the one farthest downstream and serves Units 1 and 2; intake 2 serves Units 3 and 4; and intake 3 serves Units 5 and 6.

At this point in time, we have not analyzed these data; however, it should be noted that in the case of impingement, at times fish may be seen on the traveling screens but they cannot be retrieved. For these fish no weights or lengths can be measured and these entries are seen as blanks in the appropriate columns on the daily and monthly impingement tables.

The purpose of this report is to acquaint you with the data as we have seen them. If you have any questions concerning the results or presentations, please call.

Very truly yours,

DAMES & MOORE

Gary R. Simmons
for Roger J. Hatcher
Project Manager

RFH:MS
Attachments

TABLE

MONTHLY ENTRAINMENT SUMMARY FOR APRIL
MIAMI FORT GENERATING STATION

ORGANISM TYPE SPECIES NAME	TOTAL ENT.	NO. PER 100 M**3	NUMBER EXPECTED PER DAYS SAMPLED *
FISH EGGS NO ORGANISMS OF THIS TYPE ENTRAINED IN APRIL			
FISH LARVAE			
NOT IDENTIFIED	83	76.85	2734454
FRESHWATER DRUM	3	2.77	98561
SAUGER	22	20.37	724799
CARP	1	0.92	32735
MICROPTERUS SPP.	2	1.85	65826
SUCKER FAMILY	30	36.11	284856
TOTALS			
FISH EGGS	0	0.00	0
FISH LARVAE	150	138.88	4941588

* NUMBER OF DAYS SAMPLED DURING THIS MONTH WAS 3

TABLE

MONTHLY ENTRAINMENT SUMMARY FOR MAY
MIAMI FORT GENERATING STATION

ORGANISM TYPE SPECIES NAME	TOTAL ENT.	NO. PER 10' M**3	NUMBER EXPECTED PER DAYS SAMPLED *
FISH EGGS	NO ORGANISMS OF THIS TYPE ENTRAINED IN MAY		
FISH LARVAE			
NOT IDENTIFIED	34	117.24	2366837
FRESHWATER DRUM	6	20.68	417564
EMERALD SHINER	1	3.44	69507
CARP	12	41.37	835348
MINNOW FAMILY	5	17.24	348056
SHINERS (NOTROPIS SPP.)	18	62.06	1253012
SHAD SPP.	4	13.79	278449
TOTALS			
FISH EGGS	0	0.00	0
FISH LARVAE	80	275.86	5569030

* NUMBER OF DAYS SAMPLED DURING THIS MONTH WAS 2

TABLE

MONTHLY ENTRAINMENT SUMMARY FOR JUNE
MIAMI FORT GENERATING STATION

ORGANISM TYPE SPECIES NAME	TOTAL ENT.	NO. PER 100 M**2	NUMBER EXPECTED PER DAYS SAMPLED *
FISH EGGS	NO ORGANISMS OF THIS TYPE ENTRACTED IN JUNE		
FISH LARVAE			
NOT IDENTIFIED	23	15.13	567954
GIZZARD SHAD	1	0.65	24656
FRESHWATER DRUM	55	36.18	1357958
EMERALD SHINER	4	2.63	98739
CARP	4	2.63	98739
WHITE BASS	14	9.21	<u>345544</u>
SUCKER FAMILY	4	2.63	98739
SHAD SPP.	100	65.78	2469011
LEPCMIS SP.	1	0.65	<u>24656</u>
TOTALS			
FISH EGGS	0	0.00	0
FISH LARVAE	206	135.52	<u>5086187</u>

* NUMBER OF DAYS SAMPLED DURING THIS MONTH WAS 5

TABLE

MONTHLY IMPINGEMENT SUMMARY FOR APRIL
MIAMI FORT GENERATING STATION

COMMON NAME	TOTAL NUMBER	PERCENT BY NUMBER	TOTAL WEIGHT (GMS)	PERCENT BY WEIGHT	LENGTH MIN MEAN MAX
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TOTALS	0	.00	0	.00	
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NUMBER OF DAYS SAMPLED DURING THIS MONTH WAS 3

TABLE

MONTHLY IMPINGEMENT SUMMARY FOR MAY
MIAMI FORT GENERATING STATION

COMMON NAME	TOTAL	PERCENT	TOTAL	PERCENT	LENGTH		
	NUMBER	BY NUMBER	WEIGHT (GMS)	BY WEIGHT	MIN	MEAN	MAX
GOLDEN REDHORSE	1	2.00	725	12.67		322	
SAUGER	⑤	18.00	715	12.49	113	163	271
EMERALD SHINER	7	14.00	24	.42	32	61	81
RIVER CARPSUCKER	1	2.00	1007	17.59		345	
WHITE CRAPPIE	①	2.00	95	1.68		151	
CHANNEL CATFISH	①	2.00	2	.03		72	
FRESHWATER DRUM	30	60.00	3130	55.08	100	162	255
TOTALS	⑤0	100.00	5582	99.96			

NUMBER OF DAYS SAMPLED DURING THIS MONTH WAS 2

TABLE

 MONTHLY IMPINGEMENT SUMMARY FOR JUNE
 MIAMI FORT GENERATING STATION

COMMON NAME	TOTAL	PERCENT	TOTAL	PERCENT	LENGTH		
	NUMBER	BY NUMBER	WEIGHT (GMS)	BY WEIGHT	MIN	MEAN	MAX
FRESHWATER DRUM	216	67.92	1606	63.08	28	48	217
SKIPJACK HERRING	25	7.86	44	1.73	29	51	63
GIZZARD SHAD	21	6.60	39	1.53	28	46	71
WHITE BASS	<u>11</u>	3.46	8	.31	24	33	51
SAUGER	<u>7</u>	2.20	496	19.48	61	122	340
EMERALD SHINER	5	1.57	4	.16	6	36	55
BLUEGILL	<u>3</u>	.94	27	1.06	29	54	84
PADDLEFISH	<u>2</u>	.63	1	.04		8	
WHITE CRAPPIE	<u>1</u>	.31	318	12.49		223	
RIVER CARPSUCKER	1	.31	1	.04		29	
QUILLBACK	1	.31	1	.04		36	
CHANNEL CATFISH	<u>1</u>	.31	1	.04		27	
NOT IDENTIFIED	24	7.55					
TOTALS	<u>318</u>	99.97	2546	100.00			

NUMBER OF DAYS SAMPLED DURING THIS MONTH WAS 5

8